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1006 Rec'd PCT/PTO 11 NOV 2005

Attorney Docket No. HARAP0166US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(DO/EO/US)

In re national phase of:

Applicant(s): Morito AKIYAMA, et al.  
International Application No.: PCT/JP2004/006553  
International Filing Date: 14 May 2004  
Priority Date Claimed: 15 May 2003  
Title of Invention: WURTZITE THIN FILM, LAMINATE CONTAINING WURTZITE CRYSTALLINE LAYER AND THEIR MANUFACTURING METHODS

INFORMATION DISCLOSURE STATEMENT

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1345

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: \_\_\_\_\_  
Filing Date: \_\_\_\_\_

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) ☒ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) ☐ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a) ☒ Within 3 months of the filing date, date of entry into the National Stage, or filing date of CPA.
- (b) ☐ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 for consideration of this Statement.
- (c) ☐ Before the mailing date of a first Office Action on the merits after a first or second submission after final rejection under 37 C.F.R. 1.129(a).

(d) \_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_ The required certification is given below, or

(2) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988

(e) \_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p), or

(2) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988.

4. Certification (if applicable)


(a) \_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 18-0988.

Respectfully Submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By  Reg. 50,689  
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Form PTO-1449 (Modified)  <div style="text-align: center; font-weight: bold;">LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</div> <p style="text-align: center; font-size: 0.8em;">(Use several sheets if necessary)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Atty Docket No. <b>HARAP0166US</b></td> <td style="width: 50%;">Express Mail No. <b>EV710253666US</b></td> </tr> <tr> <td colspan="2">Applicant: <b>Morito AKIYAMA, et al.</b></td> </tr> <tr> <td>Filing Date <b>November 11, 2005</b></td> <td>Group <b>Not Yet Assigned</b></td> </tr> </table>	Atty Docket No. <b>HARAP0166US</b>	Express Mail No. <b>EV710253666US</b>	Applicant: <b>Morito AKIYAMA, et al.</b>		Filing Date <b>November 11, 2005</b>	Group <b>Not Yet Assigned</b>
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**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date MM/YYYY	Name	Class	Sub-class	Filing Date if Appropriate

**FOREIGN PATENT DOCUMENTS**

FOREIGN PATENT DOCUMENTS							
Examiner Initial	Document Number	Date MM/YYYY	Country	Class	Sub-class	Translation	
						Yes	No
	2004-200843	07/2004	JP			Abstract	

**OTHER ART**

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	International Search Report for corresponding PCT/JP2004/006553, mailed, August 24, 2004.
	Morito Akiyama et al.; "Statistical approach for optimizing sputtering conditions of highly oriented aluminum nitride thin films", Thin Solid Films, 1998, Vol. 315, p. 62-65.
	Morito Akiyama et al.; "Influence of sputtering target material on crystallinity and orientation of AlN thin films", Journal of the Ceramic Society of Japan, 2002, Vol. 110, p. 115-117.
	Mikito Kamijo et al.; "Study of deposition of colored films by sputtering method", No. 14, 2000, p. 31-35.
	Yoshihito Maeda et al.; "Direct overwriting in InSbTe phase-change optical disk and the mechanism"; 1988, Vol. 88, No. 388, p. 47-52.
	Toshihiro Kamohara, et al.; "Improvement on crystal orientation of AlN thin films by AlN Nanointerlayers", March 28, 2004, No. 1, p. 402, 30p-YN-3.
	Morito Akiyama et al.; "Improvement on orientation of AlN thin films by Laminated Electrodes", March 27, 2003, No. 2, p. 691, 30a-S-3.

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**Information Disclosure Statement PTO-1449 (Modified)**

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution.